

ABSTRACT OF THE DISCLOSURE

One embodiment of a laser driver for high speed interconnections includes a buffered level shifter to shift the input voltage level to an appropriate level. In some embodiments the buffered level shifter may be tuned to provide a desired level shift with impedance matched to the driving load. Another embodiment converts a digital signal to a current train of a bias mode to represent logical zero and of a modulation mode to represent logical one, wherein one or both of the bias mode and modulation mode may be adjusted, for example by a programmable control circuit or by an adaptive control circuit. Some embodiments also provide circuitry for reducing overshoot of the output signal.